

**FACT SHEET**

as required by LAC 33:IX.3109, for major LPDES facilities for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0084336; AI 18460; PER20090002** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** City of Covington  
Covington Sewerage Treatment Facility  
P.O. Box 778  
Covington, LA 70434
- II. **PREPARED BY:** Angela Marse
- DATE PREPARED:** July 21, 2009
- III. **PERMIT ACTION:** reissue LPDES permit LA0084336, AI 18460; PER20090002  
  
LPDES application received: March 30, 2009  
  
LPDES permit issued: September 1, 2004  
LPDES permit expired: August 31, 2009

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the City of Covington.
- B. The permit application does not indicate the receipt of any industrial wastewater. Industries in the area are located outside the City limits and are not connected to the facility, authorized under other LPDES permits, or send only sanitary discharges to the City.
- C. The facility is located at 1400 West 27th Ave. in Covington, St. Tammany Parish.
- D. The treatment facility consists of an activated sludge tertiary mechanical plant with an equalization basin. Disinfection is by chlorination. Sludge is dried in drying beds.
- E. Outfall 001  
  
Discharge Location: Latitude 30° 27' 54" North  
Longitude 90° 7' 2" West  
Description: treated sanitary wastewater  
Design Capacity: 2.63 MGD  
Type of Flow Measurement which the facility is currently using:  
Combination Totalizing Meter / Continuous Recorder  
Outfall 002  
  
Discharge Location: Latitude 30° 29' 21" North  
Longitude 90° 6' 41" West  
Description: stormwater runoff  
Expected flow: varies with rainfall

## Statement of Basis

LA0084336; AI 18460; PER20090002

Page 2

Type of Flow Measurement which the facility is currently using:  
Engineering calculation based on rainfall and surface area

**V. RECEIVING WATERS:**

The discharge from Outfall 001 is into the Tchefuncte River. The discharge from 002 is into Blue Swamp Creek, thence into the Tchefuncte River. The outfalls are both in segment 040801 of the Lake Ponchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of the Tchefuncte River is 38 cfs.

The **hardness value** is 25.1 mg/l and the **fifteenth percentile value for TSS** is 4 mg/l.

The designated uses and degree of support for Segment 040801 of the Lake Ponchartrain Basin are as indicated in the table below<sup>1/</sup>:

| Overall Degree of Support for Segment 040801 | Degree of Support of Each Use |                              |                                |                                    |                       |                        |             |
|--|-------------------------------|------------------------------|--------------------------------|------------------------------------|-----------------------|------------------------|-------------|
|  | Primary Contact Recreation    | Secondary Contact Recreation | Propagation of Fish & Wildlife | Outstanding Natural Resource Water | Drinking Water Supply | Shell fish Propagation | Agriculture |
| Partial                                      | Not Supported                 | Full                         | Not Supported                  | Full                               | N/A                   | N/A                    | N/A         |

<sup>1/</sup>The designated uses and degree of support for Segment 040801 of the Lake Ponchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act, as amended by the Water Quality Act of 1987 and EPA's regulations at 40 CFR 130, requires that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 040801 ( Tchefuncte River from headwaters to Bogue Falaya River) of the Lake Pontchartrain Basin is on the 2006 Integrated 303(d) List of Impaired Waterbodies. The suspected causes of impairment are mercury and pathogens. To date no TMDLs have been completed for this waterbody. A reopener clause has been included in the permit should the TMDLs require more stringent effluent limitations be placed in the permit. Suspected causes of concern are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

**Mercury**

The named waterbody in segment 040801 (Tchefuncte River) is impaired for mercury. The source of mercury has been identified as atmospheric deposition. The discharge is directly into the Tchefuncte River. A review of the application indicates a few commercial users (dentists, medical clinics, etc.) that could potentially contribute to the receiving waterbody's mercury impairment. For these reasons, the City of Covington will be required to develop a Mercury Minimization Program Plan (MMPP). It is the position of this Department that development and implementation of a Mercury Minimization Program

## Statement of Basis

LA0084336; AI 18460; PER20090002

Page 3

Plan (MMPP) continues to be the most efficient reduction of mercury discharges to surface waters of Louisiana from the City of Covington's wastewater treatment facility. Pollution prevention and waste minimization are more reasonably accomplished and cost productive than the implementation of controls and technologies to meet such stringent end-of-pipe mercury limitations. The MMPP employs EPA approved analytical methods (*EPA Methods 1631, 245.7*) through effluent sampling and system wide monitoring programs to locate and identify potential sources of mercury in the treatment system. Once identified the MMPP integrates cost-effective reduction controls, either treatment or prevention based, to reduce or eliminate mercury from the source. Should the TMDL for mercury determine a mercury effluent limitation is necessary, a reopener clause has been included in the draft permit. Data collected from monitoring required by the MMPP may help the City evaluate compliance with any final mercury TMDL.

**Pathogen Indicators**

Monitoring for fecal coliform is the best indicator for the potential presence of pathogenic organisms in wastewater. To protect against potential receiving water impairments due to pathogens, fecal coliform limits have been established in the permit. Permit limits are reflective of water quality standards for primary contact recreation, a designated use of the receiving stream.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 040801 of the Lake Ponchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the *Gulf Sturgeon*, which is listed as a threatened/endangered species. This draft permit has been sent to the FWS for review. As set forth in the Memorandum of Understanding between the LDEQ and the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse affect upon the *Gulf Sturgeon* since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse

Water Permits Division

Department of Environmental Quality

Office of Environmental Services

P. O. Box 4313

Baton Rouge, Louisiana 70821-4313

## Statement of Basis

LA0084336; AI 18460; PER20090002

Page 4

**IX. PROPOSED PERMIT LIMITS:****Final Effluent Limits:****OUTFALL 001**

Because no TMDL or other water quality studies have been approved since the issuance of the previous permit and no changes have occurred at the facility, the effluent limitations have remained the same as the previous permit. Reporting of TKN is no longer required by the permit. The Tchefuncte River is not impaired for nutrients or nitrogen; however, an ammonia limit is contained in the permit.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

| Effluent Characteristic | Monthly Avg.<br>(lbs./day) | Monthly Avg. | Weekly Avg. | Basis  |
|-------------------------|----------------------------|--------------|-------------|--|
| CBOD <sub>5</sub>       | 219                        | 10 mg/l      | 15 mg/l     | Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size.   |
| TSS                     | 329                        | 15 mg/l      | 23 mg/l     | Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. |
| Ammonia-Nitrogen        | 88                         | 4 mg/l       | 8 mg/l      | BPJ based on the previous permit effluent limit. Limits based on toxicity concerns of the USEPA Region 6 for all majors.   |

## Statement of Basis

LA0084336; AI 18460; PER20090002

Page 5

**Priority Pollutants**

The proposed draft permit contains water quality based limits for copper and zinc. The previous permit also contained effluent limits for copper and zinc.

| <b>Effluent Characteristic</b> | <b>Monthly Avg.</b> | <b>Daily Max.</b> | <b>Basis</b>   |
|--------------------------------|---------------------|-------------------|--|
| Copper                         | 0.22 lb/day         | 0.53 lb/day       | Water quality based effluent limit based on analytical data submitted with the application, DMR data, and receiving waterbody characteristics. |
| Zinc                           | 1.83 lb/day         | 4.33 lb/day       | Water quality based effluent limit based on analytical data submitted with the application, DMR data, and receiving waterbody characteristics. |

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**4) Total Residual Chlorine**

If chlorination is used to achieve the limitations on Fecal Coliform Bacteria, the effluent shall contain NO MEASURABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. The TRC shall be monitored daily by grab sample.

## Statement of Basis

LA0084336; AI 18460; PER20090002

Page 6

## 5) Toxicity Characteristics

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, April 16, 2008, VERSION 6). Whole effluent toxicity testing is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics.

Based on information contained in the permit application and a review of biomonitoring test results required by the previous permit, LDEQ has determined there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream in violation of Section 101(a)(3) of the Clean Water Act. Testing since the issuance of the previous permit shows the permittee complied with the biomonitoring requirements contained in LA00864336 with no toxicity failures on file during the past five years.

It is recommended that freshwater chronic biomonitoring continue to be an effluent characteristic of Outfall 001 at the frequency indicated below. If no significant lethal effects are demonstrated at or below the critical dilution during the first four quarters of testing, the permittee may certify fulfillment of the WET testing requirements to the permitting authority and WET testing may be reduced to not less than once per six months for the more sensitive species (*Ceriodaphnia dubia*) and not less than once per year for the less sensitive species (*Pimephales promelas*) for the remainder of the term of the permit. Upon expiration of the permit, the monitoring frequency for both test species shall revert to once per quarter until the permit is re-issued.

The toxicity test procedures stipulated as a condition of this permit are listed below.

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0084336 **Section E** for the organisms indicated below.

TOXICITY TESTSFREQUENCY

|  |           |
|--|-----------|
| Chronic static renewal 7-day survival & reproduction test<br>using <i>Ceriodaphnia dubia</i> (Method 1002.0) | 1/quarter |
|--|-----------|

|  |           |
|--|-----------|
| Chronic static renewal 7-day survival & growth test<br>using fathead minnow ( <i>Pimephales promelas</i> ) (Method 1000.0) | 1/quarter |
|--|-----------|

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 4%, 5%, 7%, 10%, and 13%. The whole effluent toxicity limit (critical low-flow dilution) is defined as 10% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in **Section E** under Whole Effluent Toxicity Testing. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in **Section E** of the permit.

## Statement of Basis

LA0084336; AI 18460; PER20090002

Page 7

**OUTFALL 002**

The Multi-Sector General Permit authorizes the discharge of stormwater from industrial facilities within the State of Louisiana as defined in LAC 33:IX.2511.B.14. Treatment works treating domestic septage with a design capacity over 1MGD are included in the definition of industrial activity. Sector T of the Multi-Sector General Permit applies to domestic sewage treatment. Therefore, effluent limits for outfall 002 are based on the Multi-Sector General Permit, Sector T. In addition to meeting the effluent limitations below, the City of Covington continue to maintain a Stormwater Pollution Prevention Plan (SWPPP) as part of the conditions of the reissued permit.

| Effluent Characteristic | Monthly Avg. | Daily Max. | Basis  |
|-------------------------|--------------|------------|--|
| TOC                     | ---          | 50 mg/l    | Multi-Sector General Permit, Sector T issued April 28, 2006. |
| Oil and grease          | ---          | 15 mg/l    | Multi-Sector General Permit, Sector T issued April 28, 2006. |

**Other Effluent Limitations for Outfall 002:****1) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**2) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X. PREVIOUS PERMITS:**

**LPDES Permit No. LA0084336:** Issued: September 1, 2004  
Expired: August 31, 2009

**Outfall 001**

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> |                    | <u>Monitoring Requirements</u> |                    |
|--------------------------------|------------------------------|--------------------|--------------------------------|--------------------|
|                                | <u>Monthly Avg.</u>          | <u>Weekly Avg.</u> | <u>Measurement Frequency</u>   | <u>Sample Type</u> |
| Flow                           | Report                       | Report             | Continuous                     | Recorder           |
| CBOD <sub>5</sub>              | 10 mg/l                      | 15 mg/l            | 2/week                         | Grab               |
| TSS                            | 15 mg/l                      | 23 mg/l            | 2/week                         | Grab               |
| Ammonia-Nitrogen               | 4 mg/l                       | 8 mg/l             | 2/week                         | Grab               |
| Kjeldahl Nitrogen              | Report mg/l                  | Report mg/l        | 1/quarter                      | Grab               |
| TRC                            | No Measurable                |                    | 1/day                          | Grab               |
| Fecal Coliform Colonies        | 200                          | 400                | 2/week                         | Grab               |
| pH                             | ---                          | ---                | 2/week                         | Grab               |
| Total Copper                   | 0.21 lb/day                  | 0.5 lb/day         | 1/quarter                      | Grab               |
| Total Zinc                     | 1.73 lb/day                  | 4.12lb/day         | 1/quarter                      | Grab               |

## Statement of Basis

LA0084336; AI 18460; PER20090002

Page 8

**Outfall 002**

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> |                    | <u>Monitoring Requirements</u> |                    |
|--------------------------------|------------------------------|--------------------|--------------------------------|--------------------|
|                                | <u>Monthly Avg.</u>          | <u>Weekly Avg.</u> | <u>Measurement Frequency</u>   | <u>Sample Type</u> |
| Flow                           | Report                       | Report             | 1/quarter                      | Estimate           |
| TSS                            | 15 mg/l                      | 23 mg/l            | 1/quarter                      | Estimate           |
| TOC                            | ---                          | 50 mg/l            | 1/quarter                      | Estimate           |
| pH                             | ---                          | ---                | 1/quarter                      | Estimate           |

The permit contains biomonitoring.

The permit contains pollution prevention language.

The permit contains pretreatment language.

The permit contains stormwater pollution prevention language.

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates the following most recent inspection was performed for this facility.

Date: March 19, 2009

Inspector: Angela Gagliano

Findings and/or Violations:

1. Facility appeared to be operating properly and well maintained.
2. Facility operates under LPDES Permit LA0084336, effective September 1, 2004.
3. Flow meter was calibrated 2/10/2009.
4. Facility has reported 5 overflows in the collection system since the last inspection January 1, 2007.
5. Facility is not implementing their SWP3.
6. The effluent from all three plants appeared clear at the time of inspection.
7. The facility reported one excursion in November, 2007 for ammonia.
8. Curtis Environmental Services is the City's contract lab and Breaux Services is used for sludge disposal.

**B) Compliance and/or Administrative Orders**

A review of the files indicates the following most recent enforcement actions administered against this facility:

**EPA Issuance:**

Docket #: CWA-06-2008-2004

Date Issued: October 1, 2008

Findings of Fact:

1. The permittee is subject to 40CFR Part 503 (Use and Disposal of Sewage Sludge) and as such is required to submit to EPA an annual sludge monitoring report. The City failed to submit such report for the calendar years 2006 and 2007.

Order:

1. The permittee was ordered to complete and submit the 2006 and 2007 annual sludge monitoring reports for sludge operation within thirty (30) calendar days.

## Statement of Basis

LA0084336; AI 18460; PER20090002

Page 9

## C) DMR Review

A review of the discharge monitoring reports for the period beginning January, 2007 through December, 2008 has revealed the following violations:

| Parameter | Outfall | Period of Excursion | Permit Limit | Reported Quantity |
|-----------|---------|---------------------|--------------|-------------------|
| ammonia   | 001     | November, 2007      | 4 mg/l       | 4.2 mg/l          |

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 2.63 MGD.

Effluent loadings are calculated using the following example:

$$\text{CBOD: } 8.34 \text{ lb/gal} \times 2.63 \text{ MGD} \times 10 \text{ mg/l} = 219 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are the same as the previous permit.

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, standard pretreatment language has been included in the permit.

## Statement of Basis

LA0084336; AI 18460; PER20090002

Page 10

**Pollution Prevention Requirements**

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

| Audit Period Begins      | Audit Period Ends                          | Audit Report Completion Date           |
|--------------------------|--|--|
| Effective Date of Permit | 12 Months from Audit Period Beginning Date | 3 Months from Audit Period Ending Date |

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV. REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2008.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2008.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, City of Covington, Covington Sewerage Treatment Facility, March 30, 2009.